SONY

MULTISCAN

20″ Color Video Monitor

GVM-2020

NTSC

• Simulated picture

A Monitor For A Variety Of Sources—GVM-2020

In a society overflowingly filled with information, messages are delivered to target audiences through various media in response to diversified needs and purposes. Following this growing trend, a display unit capable of conveying information clearly without source limitation while grabbing the attention of viewers has been demanded. Sony now gives the answer, the GVM-2020, a 20" color monitor with the multiscan facility.

The GVM-2020 provides many features, such as multiple inputs with audio for system versatility, high resolution for clear, sharp image display, multiscan facility for compatibility with computers and stable color reproduction due to a current feedback circuit.

Through the GVM-2020, you can have any audio/visual message displayed whenever you need it. In addition, the adoption of slot type RGB input modules will allow for the future computer compatibility.

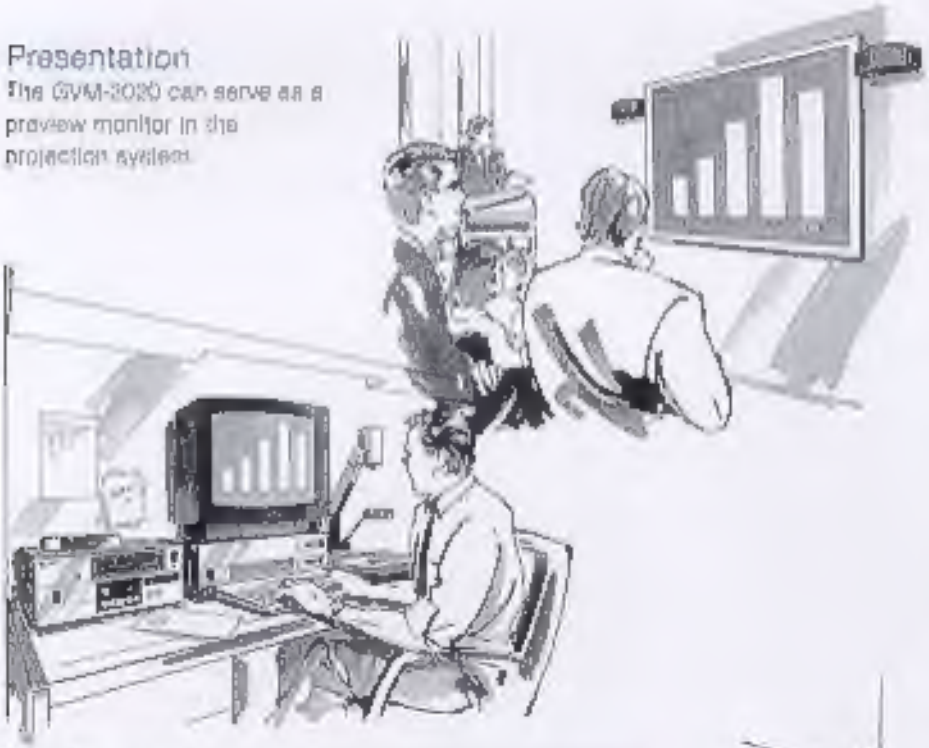
Providing easy access to information, the GVM-2020 will prove indispensable for better communication. This monitor will serve your display needs now and in the future.

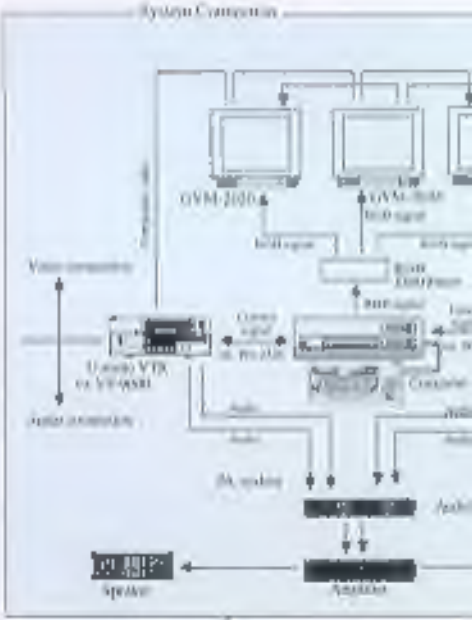
APPLICATIONS

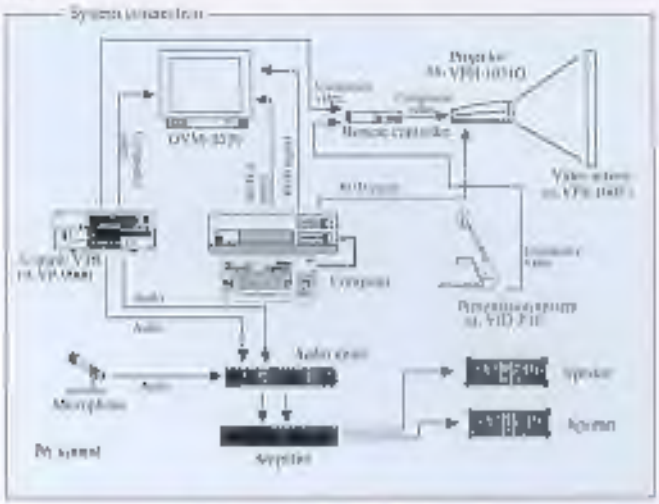
With the GVM-2020, a variety of applications is now possible; training/education, POP/POI, sub display The GVM-2020 will be the ideal choice for your needs.

Presentation

The GVM-2020 can serve as a preview monitor in the projection system.







Information Display

Presenting various pictures, the GVM-2020 is effective for information display. Its eye pleasing picture draws people's attention.

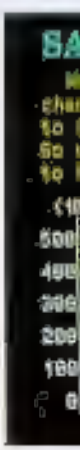
WITH A VARIETY OF MEDIA

VTR/Live Camera/Laser Disc Player

Based on accumulated experience in monitor development, the GVM-2020 is designed to present professional-like pictures with audio.

Computer Data/Text

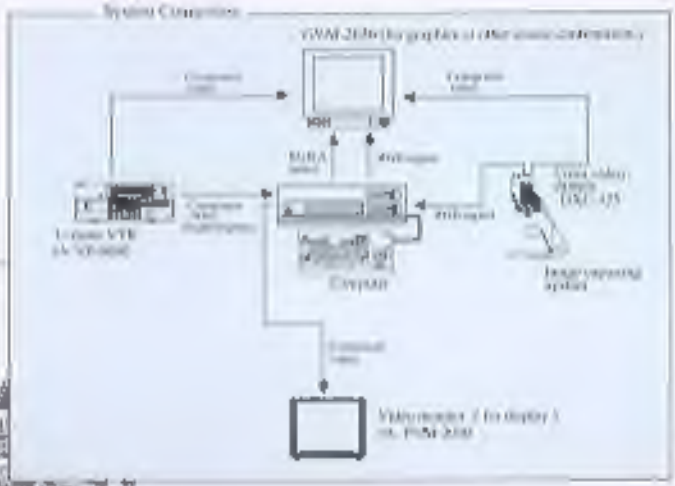
Even tiny characters or data can be accurately reproduced on the GVM-2020. The display will facilitate communication.



rge screen projection system, or public address monitor in large network.

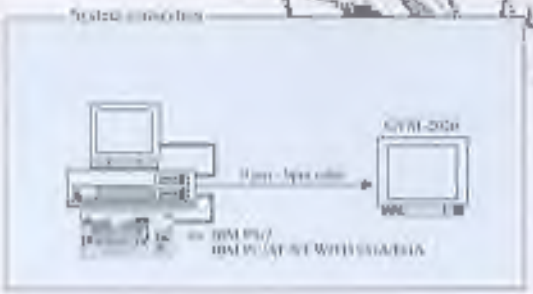
Multiple Source Display

With the flexible and stable picture performance, the GVM-2020 can be used in the production facility.



Computer Graphic Creation

Displaying details of pictures at the stage of image creation, or showing the completed image to clients, the GVM-2020 is helpful for computer graphic creation.



Computer Graphics

The high resolution TRINITRON CRT produces a superior graphic display, which will have a strong impact on viewers.

FEATURES

Multiple Inputs With Audio

The multiple input facilities, Composite, Y/C, and Analog/TTL RGB inputs, enable the GVM-2020 to cover diversified display needs. Whatever the picture sources, VTR, laser disc player, computer, or whatever the application, the monitor can present pleasing pictures. Furthermore, the monitor has audio capabilities to make it an even better display tool.

Multiscan Facility

The scanning frequency of computers varies as many as model numbers. Thanks to the multiscan facility, the GVM-2020 can be used with various computers including an IBM PC/XT/AT with CGA or EGA cards, or IBM PS/2, representing a wide frequency range, 15kHz to 38kHz horizontally and 50Hz to 100Hz vertically. The monitor is designed to automatically detect the frequency of the signal being input and locks onto it. The GVM-2020 is versatile enough to respond to a variety of picture sources.

Compatibility With Sync

In addition to the multiscan facility, the compatibility with various sync type was incorporated into the monitor design. Composite or separate sync, as well as a sync on green, positive or negative sync, TTL level or analog level sync, can be accepted.

Horizontal Shift And Horizontal/Vertical Size Controls In The RGB Mode

Despite input signal frequency differences, the monitor is designed to display complete pictures without any missing columns. In addition, the position and size of pictures can be adjusted according to customer preference.

Superior Picture Performance

The GVM-2020 is provided with sophisticated circuits to achieve superior picture performance.

- The resolution of 560 TV lines/720 × 480 pixels assures precise picture reproduction. When very small character text or dense graphic displays are required, the GVM-2020 can fulfill the needs.
- The dynamic picture circuit contributes to high contrast picture reproduction.
- The automatic current feedback circuit maximizes the stability in color balance which is essential to monitor performance.
- The newly developed compensation circuit is adopted to provide accurate computer graphics/data display. This allows any pincushion distortion to be reduced better than ever.

Regardless of applications or operational conditions, quality pictures will be displayed.

Slot Type RGB Inputs

For compatibility with computers available in the future, the GVM-2020 employs slot type RGB input modules. Merely by exchanging an RGB input module, compatibility with various computers can be achieved. Its flexibility greatly broaden application possibilities.

Versatility

- Due to the built-in decoder board, an 8, 16 or 64-color* display can be obtained with the mode selection switch.
- By using the RGB A SELECT, switching pictures from the RGB A input to the other inputs, LINE A/LINE B/ RGB B, or vice versa, can be performed from the computer keyboard.
- Last memory function allows the GVM-2020 to retain the same PICTURE and VOLUME control settings used before the power was turned off.
- The SUB PICTURE control is provided for the RGB inputs to adjust contrast, color and brightness when the display mode is switched from the composite/Y/C to the RGB mode, or vice versa. Regardless of picture source difference, the GVM-2020 can display satisfying pictures without any color impairment.

*16 or 64 color mode is automatically selected.

TRINITRON CRT

The Emmy Award winning TRINITRON CRT offers high quality pictures. Due to its unique structure, computer generated data/graphics can be clearly reproduced from the corner to corner on the full square screen.

Front Panel Control Section With Lid Opened

Specifications

Color system: NTSC
Picture tube: 21" Trinitron tube (20" visible picture measured diagonally)
90 degree deflection
AG pitch 0.55mm (center 0.5mm)
Resolution
Video input: 500 TV lines
RGB inputs: 720 x 480 pixels
Color temperature: 9300K
Frequency response
Composite video: 7MHz
YC: 7MHz
RGB: 30MHz
Linearity
Horizontal: Less than ± 3%
Vertical: Less than ± 5%
Scanning frequency (RGB input)
Horizontal: 15 – 38kHz
Vertical: 50 – 100Hz
Scanning size variable range (RGB input)
Horizontal: +5% – –1%
Vertical: +5% – –1%
Audio output: 2W, Stereo, monaural
Input
Video
LINE A: Composite: 1Vp-p ± 6dB, sync negative, automatic 75ohm termination, loop-through BNC
LINE B: Y/C*1: Y (luminance signal)
1Vp-p ± 6dB, sync negative, 75ohm termination switchable
C (chrominance)
0.286Vp-p ± 6dB (Burst signal) 75ohm termination switchable
loop-through Mini DIN 4 pin
Composite*2: 1Vp-p ± 6dB, sync negative, automatic 75ohm termination, loop-through BNC
*1 The Y/C input has priority over the composite input.
RGB
RGB A (D-sub 9 pin connector, female)*3
Analog RGB: 0.7Vp-p, 75ohm terminated, positive
Digital RGB: TTL level positive
Sync: Composite sync: 1Vp-p, negative, 75 ohm terminated
Horizontal/Vertical separate sync: TTL, negative/positive

<Pin assignment>

Pin No.	Analog RGB	Digital RGB*4			
		8 colors	16 colors	64 colors	Monochrome
1	GND	GND	GND	GND	GND
2	N.C	N.C	N.C	I	N.C
3	R	R	R	D	N.C
4	G	G	G	G	N.C
5	B	B	B	B	N.C
6	N.C	N.C	R	R	N.C
7	N.C	N.C	N.C	B	Y
8	H/HV sync	H/HV sync	H/HV sync	H/HV sync	H/HV sync
9	V sync	V sync	V sync	V sync	Vsync

(NOTE) N.C: not connected
R: internal sync

*3 Analog or Digital RGB is switch selectable
*4 8 or 16/64 color mode is switch selectable

RGB B (BNC connector)
RGB: 0.7Vp-p, 75ohm terminated, positive
Sync: Composite sync: 1Vp-p, negative, 75 ohm terminated
H/HV/D: TTL, negative/positive
Sync on Green
0.3Vp-p, negative, 75 ohm terminated

Audio
LINE A: –5dBs, high impedance, loop-through phono
LINE B: –5dBs, high impedance, loop-through phono
RGB A: –5dBs, high impedance, phono
RGB B: –5dBs, high impedance, phono
Control inputs
CONTROL S: Mini jack
VOLUME, PICTURE UP/DOWN, POWER ON/OFF, LINE A/LINE B/RGB A/RGB B selection
RGB A SELECTOR: Mini jack
High: open or Open: LINE A/LINE B/RGB B
Low: short: RGB A
Power requirements: 120V AC 60/50Hz
Power consumption: Max. 190W
Dimensions: 510(W) x 475(H) x 510(D)mm
(20 1/8 x 18 7/8 x 20 1/8")
Weight: Approx. 30 kg (66 lb 2 oz)

Rear Panel Connector Section

Design and specifications subject to change without notice.

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